

Serial No. 10/824,214
05 October 2004 Reply to
24 August 2004 Office Action

Amendments to the Claims:

Please cancel claim 12. The following listing of claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1. (Currently Amended) A method of determining an analyte concentration in a tissue of a subject, the subject including an eye with an ocular surface and a conjunctiva surface, comprising the steps:
 - a. exposing at least a portion of ~~athe~~ conjunctiva surface of ~~athe~~ subject to electromagnetic radiation without contact with the ocular surface;
 - b. detecting electromagnetic radiation reflected from ~~saidthe~~ conjunctiva without contact with the ocular surface; and,
 - c. determining a radiation signature of said reflected electromagnetic radiation to determine an analyte concentration in ~~athe~~ tissue of ~~saidthe~~ subject.
2. (Original) The method of Claim 1, wherein said method is non-invasive and wherein said subject is a human.
3. (Original) The method of Claim 1, wherein said analyte is selected from the group consisting of metabolic compounds or substances, carbohydrates, sugars, glucose, proteins, peptides, amino acids, fats, fatty acids, triglycerides, polysaccharides, alcohols, ethanol, toxins, hormones, vitamins, bacteria-related substances, fungus-related substances, virus-related substances, parasite-related substances, pharmaceutical compounds, non-pharmaceutical compounds, pro-drugs, drugs, and any precursor, metabolite, degradation product or surrogate marker.
4. (Original) The method of Claim 3, wherein said analyte is glucose.

Serial No. 10/824,214
05 October 2004 Reply to
24 August 2004 Office Action

5. (Original) The method of Claim 1, wherein said electromagnetic radiation is mid-infrared radiation.
6. (Original) The method of Claim 5, wherein the mid-infrared radiation is in a wavelength range of about 2.5 microns to about 25.0 microns.
7. (Original) The method of Claim 1, wherein said detecting step further comprises selecting at least one wavelength within said reflected electromagnetic radiation.
8. (Original) The method of Claim 7, wherein said selecting of said reflected electromagnetic radiation further comprises filtering said reflected electromagnetic radiation.
9. (Original) The method of Claim 1, wherein said determining step further comprises using a microprocessor.
10. (Original) The method of Claim 1, wherein said reflected electromagnetic radiation comprises infrared radiation having a wavelength range between about 2.5 microns to about 25.0 microns.
11. (Currently Amended) The method of Claim 10, wherein said reflected infrared radiation is within the wavelength range between about ~~2.5~~8.0 microns to about 11.0 microns.
12. (Cancelled)
13. (Original) A method of downloading and storing a subject's measured analyte concentration, comprising the steps of:
 - a. measuring said analyte concentration according to the method of Claim 1 using a non-invasive instrument having a communications interface;

Serial No. 10/824,214
05 October 2004 Reply to
24 August 2004 Office Action

- b. connecting said non-invasive instrument through said communications interface to a computer system having a computer processor, a computer program which executes in said computer processor, and an analogous communications interface; and
- c. downloading from said non-invasive instrument to said computer system said measured analyte concentrations.